NOTES ON TASMANIAN DIPTERA AND DESCRIPTIONS OF NEW SPECIES, ETC.

By G. H. HARDY.

(Read 12th June, 1916. Issued separately 23rd Dec., 1916.)

CYRTIDÆ.

ONCODES FLAVESCENS, White.

- O. flavescens, White. P. and P. Roy. Soc. Tas., 1914, pg. 70.
- O. nigrinervis, White. id. pg. 71.

O. ater, White. id. pg. 72.

The three specimens of Oncodes, described by Mr. White are undoubtedly variations of the same species. I have a long series of Oncodes showing several variations and sizes graduating between the three descriptions, and from observations made at Launceston, where they were abundant, I have no hesitation in stating that flavescens is the male, and the other two are females.

Mr. White informs me that specimens of nigrinervis have been taken in Victoria and New South Wales, whilst ater is only known from Tasmania. I revised my series giving this consideration, but can find no real distinction on examining my series as a whole. The following table gives the localities of Oncodes in my collection, and 'he number of specimens taken:—

		N	.W. Cha	st.	Launcest	on.	East Coa	st.	Others.	Total.
F	lavescens		2		6		11		1	20
N	igrinervis		3		-12		23		1	39
A	ter		6				3			9
Pygmæus										2
	Totals									70

The two N.W. Coast (Wynyard) flavescens could well be the male of var. ater (the apical yellow margins are partly obsolete), to which form, the three nigrinervis from the same district closely approximate.

All the Launceston specimens are typical, both male and female, but the East Coast specimens (Triabunna and Maria Island) show marked variation, so much so, that I have difficulty in isolating the true ater from nigrinervis.

I leave the identification of O. pygmacus until further specimens are to hand, but J suspect the species will ultimately fall to a variety of O. flavescens. The abdomen of pygmacus seems to be identical with the colour of the abdomen in dead specimens found clinging to twigs, and indeed some live specimens show signs of the abdomen becoming similarly discoloured.

A pair from Launceston (in cop.?), not included in the above table, has the female with the abdomen damaged, and this has a decided "red-brown" colour.

The following descriptions cover my series of O. flavescens, both male and female.

Male. Black; the abdomen often extensively marked especially in large specimens) with yellow and yellow-brown; legs yellow-brown, and often stained with black. Wings hyaline, veins varying from yellowish to very faintly marked.

Female. Black; the apex of the abdominal segments generally conspicuously bordered narrowly white; legs varying as in male. Wings sometimes suffused with brown or smoky (hyaline in small specimens), the veins in large specimens often strongly marked.

Female, var. ater (White). Under this name I propose to include specimens with black abdomens, and without trace of apical white margins.

The chief sexual character is to be found in the shape of the abdomen, where, in the male, the abdomen is distinctly longer than wide. In the female the abdomen is scarcely longer than wide, and viewed from above, the outline forms almost a circle. If the apical borders of the abdominal segments are present, they are light yellow in the male, and white in the female.

Length. Male, 8 mm. to 5 mm.; female, 7 mm. to 4 mm.

My dates range from November 10 to February 6, and without doubt this period will be considerably extended.*

Specimens can be taken at all hours of the day, occasionally in quantities, sitting on the underside of dead twigs of trees where their inflated bodies form conspicuous objects against the sky.

 $^{^{*}\}mathrm{Since}$ the above was written, I took a male specimen in Hobart dated 1st October, 1916.

TABANIDÆ.

TABANUS WYNYARDENSIS, Sp. nov.

Male. Hairy, black and brown; easily identified by the broad black stripe down the brown abdomen, and the absence of recurrent vein. Eyes densely hairy.

Face greyish, with black hairs, beard yellow. Palpi brown with long yellow, brown and black hairs; rounded apically. Antennæ brown, second joint light, the third joint apically very dark. Thorax olive, with three black stripes, scutellum black, the whole covered with upright black and brown hair.

Abdomen brown, with a broad median black stripe covering more than half the area, with black and brown hair, which is upright on the basal segments and more or less depressed apically; the apical margins of the segments fringed with yellow hair. Underside of abdomen uniform lighter brown, covered with shorter light hair. Legs brown. Wings hyaline, stigma brown, appendix absent.

Length, 13 mm.

Hab. Wynyard, 3rd February, 1916. 2 males.

A specimen in the collection of the Agricultural Department is labelled "Swansea, Tas., Lea."

The eyes of *Tabanus similis*, *Macq.*, according to Miss Ricardo, are bare, therefore it is unlikely this species is the male of *T. similis*, which according to Mr. White's key it would naturally run to.

PELECORHYNCHUS ERISTALOIDES, Walk.

I took a second male specimen of this species at Geeveston on the 19th January, 1916.

P. eristaloides, subsp. montanus., subsp. nov.

Differs from the typical *eristaloides* by having more slender shape, smaller white spots on the thorax (about half the size), narrower black stripes on the thorax (about two-thirds the width), the entire absence of red hair, and the spots on the wings being almost entirely obsolete.

Type (male) taken in cop. with a female on the 6th January, 1916. Another pair in cop., and a further two males and two females were taken on the 10th January, 1916. Another specimen, in the the collection of the Agricultural Department, was taken by Mr. A. M. Lea.

Length. Male 15 mm., female 18 mm.

Hab. Summit of Mt. Wellington, where it is fairly abundant on the low flowering shrubs, but almost impos-

sible to catch when active on the wing. The specimens secured were taken between 10 and 11 a.m., when beginning to fly.

Pelecorhynchus fusconiger, Walk.

Two specimens in the Museum collection, in bai condition, and a further two specimens in the Agricultural Department's collection bear a label "Ulverstone, Tas.; Lea."

THEREVIDÆ.

ANABARRHYNCHUS, Macq.

Under this genus, Mr. White described eight species from Tasmania, adding the name of another as doubtfully Tasmanian.

There are three coastal species occurring on sand-dunes, namely, pallidus, the doubtful Tasmanian species rufipes, and a new species described below.

The three can be readily distinguished from all other species, except perhaps montanus, by the wings, which are tinged yellow or brown along the veins. This characteristic is sometimes faint in pallidus. My specimens of montanus (from Mt. Wellington) are all slightly tinged dark along veins except one, but montanus will not be confused in any way with the coastal species.

Anabarrhynchus Rufipes, Macq.

Readily distinguished by the yellow-brown femora and tibiæ, the grey thorax with three brown stripes, and the wings tinged yellow along the veins.

Male. Head grey, front darker centrally, with black hair, proboscis prominent. Antennæ, first jeint shorter than the other two joints combined (in pallidus the first joint is longer), the first two joints brownish, the third joint black, basally brownish. Thorax grey, with three parallel brown stripes, darkest down the centre: the central stripe is black down the centre, and is continued on the scutellum. Abdomen black-brown, with the apical and side margins of segments grey, except the three apical segments which are generally more or less uniformly light yellowish-brown tinged. Legs yellowish-brown, coxe and trochanters grey, the femora and tibiæ apically stained black, the tarsi with the apical half of first, and whole of the following segments black. Wings similar to pallidus, but veins black.

Female differs from the male in having the front brown. Length. Male 9 mm., fem. 10.5 mm. Hab. Sand-dunes on the Coast. Maria Island, 1 male and 1 female. 1st January, 1916. Also collected by Mr. Clive Cole at Bellerive during January and February.

It is readily distinguished from pallidus, with which it occurs, by the three distinct stripes on the therax, the face not being produced so prominently, the absence of two spots on the front, the different proportions of the antennæ, the knees of the legs being black, and its larger size.

Anabarrhynchus maritimus, sp. nov.

In Mr. White's key this would run to *latifrons*, but is easily distinguished by its two conspicuous brown stripes on the thorax and the wings tinged along veins.

Male. Black, face white, the front shining black with black pubescence. Antennæ with the first joint as long as the third (in latifrons it is shorter). Thorax shining with two distinct light brown stripes, not reaching the apex, and a pair of whitish shoulder stripes. Abdomen with only three of the segments bordered white apically. Legs as in latifrons. Veins of wings bordered with a dark tinge.

Female similar to the male.

Hab. Sand-dunes on Coast. Maria Island, 1st January, 1916, one pair in cop., and one female. St. Helens, six specimens collected on the same date by Mr. F. M. Littler.

ASILIDÆ.

Brachyrrhopala nitidus, Macq.

Apparently the male only is described under this name. I have females from Wynyard and Eaglehawk Neck that agree with the description of the male, and also a female from Mr. Wellington so very distinctive that it might be an entirely new species, but I am unable to find a reliable distinction other than size and colour. The males are not uncommon on Mt. Wellington, I have not seen a female other than this unique specimen from the locality. I propose to call the variety:—

B. nitidus, var. dissimilis, var. nov.

Female. A large yellow species with hyaline wings and black veins. Its yellow colour will at once distinguish it from the typical nitidus, and also its clear wings give it a very distinctive appearance.

Dull yellow. Face dull reddish, and not bright yellow as in typical nitidus, antennæ red. Thorax, as in typical nitidus, has black markings, but differs in having po yellow

or whitish markings mixed with the black. Abdomen with black markings on basal segments as in typical nitidus. Legs uniform yellow; the black claws, and yellow spurs on the anterior tibiæ, much smaller in proportion to the typical nitidus.

A comparison of dimensions between the female typical species and the variety is of interest.

Fem. typical *nitidus*. Fem. *var. dissimilis*. Length 18-22 mm. 22 mm.

Maximum width

across thorax . 3 mm. 4 mm

Maximum width across abdo-

men 2 - 2.5 mm. 4 mm.

Hab. Mt. Wellington, 2,000ft. 10th January, 1916.